

## AMENDMENTS

### In the Claims:

Please cancel claims 1-9, 13, 15-23, 26-36, 44-45, 54-59, 61-67, 69, 71-72, 78-81, 83-84 and 86-98 without prejudice.

Please amend claims 10, 12, 37, 40, 42, 46-48, 82 and 85 as follows:

F1 10. (Twice Amended) A [The] method [according to claim 1, wherein the solvent comprised in the initial mixture is organic] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and an organic solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent.

F2 12. (Twice Amended) A [The] method [according to claim 1, wherein the solvent comprised in the initial mixture] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and a solvent(s) for the glass matrix-forming material, wherein the solvent(s) is a combination of aqueous and organic liquids;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent.

FB 3.37 (Once Amended) A [The] method [according to claim 36, wherein the additive is] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

wherein the method further comprises the step of adding at least one volatile salt to the mixture before step (c).

FD 6.40 (Thrice Amended) A [The] method [according to claim 36, wherein the additive is] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

Cont  
F4  
(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

wherein the method further comprises the step of adding at least one salt that decomposes under less than atmospheric pressure to give a gaseous product to the mixture before step (c).

FS 8 42. (Twice Amended) A [The] method [according to claim 36, wherein the additive is] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

wherein the method further comprises the step of adding at least one volatile organic liquid to the mixture before step (c).

FS 9 46. (Once Amended) A [The] method [according to claim 45,] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

wherein the method further comprises the step of adding at least one additive to the mixture before step (c), wherein the additive is a foam stabilizing agent, wherein the foam stabilization agent is a viscosity modifier, and wherein the viscosity modifier is a guar gum.

F7 10 47. (Twice Amended) A [The] method [according to claim 44,] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

wherein the method further comprises the step of adding at least one additive to the mixture before step (c), wherein the additive is a foam stabilizing agent, and wherein the foam stabilization agent is a surface-active amphipathic molecule.

F8 11 48. (Once Amended) A [The] method [according to claim 36, wherein the additive is] for producing foamed glass matrices (FGMs) containing a biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent, and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

ConA  
F8

wherein the method further comprises the step of adding at least additive that is an inhibitor of the Maillard reaction to the mixture before step (c).

---

F9 12/82. (Once Amended) A [The] method [according to claim 58,] for preserving a biologically active agent within a foamed glass matrix (FGM) comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent to be preserved and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

wherein the biologically active agent to be preserved is a vaccine; and

wherein the vaccine comprises Hepatitis B Surface Antigen, measles virus, or oral polio virus.

---

F10 13/85. (Twice Amended) A [The] method [according to claim 62,] for preserving a biologically active agent within a foamed glass matrix (FGM) comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material containing a biologically active agent to be preserved selected from the group consisting of a therapeutic agent, a prophylactic agent, a pharmaceutically effective substance and a diagnostic reagent and solvent(s) for the glass matrix-forming material;

(b) evaporating a portion of the solvent(s) from the mixture to obtain a syrup;

(c) boiling the syrup under less than atmospheric pressure to produce foaming of the syrup; and

(d) continuing step (c) until the boiling results in the formation of a solid foam and produces a foamed glass matrix containing the biologically active agent;

wherein the biologically active agent to be preserved is dissolved in the mixture.

---